

Assignment Day 3

1. **Electricity Bill Calculator:** Write a Java program to calculate electricity charges for domestic users based on the number of units consumed.

Problem Statement:

The electricity board charges domestic users according to the following rates:

For the first 100 units: ₹0.40 per unit

For the next 200 units (i.e., from 101 to 300): ₹0.50 per unit

For units above 300: ₹0.60 per unit

Additional Charges:

A minimum charge of ₹500 is applied.

If the total bill exceeds ₹250, an additional surcharge of 15% is added to the total.

2. Write a Java program to read a 3x3 matrix from the user and print its transpose.

Enter elements of 3x3 matrix:

1 2 3

4 5 6

7 8 9

Original Matrix:

1 2 3

4 5 6

7 8 9

Transpose of the Matrix:

1 4 7

2 5 8

3 6 9

3. Write a Java program to Calculate LCM of n numbers and HCM of n numbers using array.
4. Write a Java program to calculate a) Area of a **circle** b) Area of a **cylinder** using **static methods** and a **constant** variable $PI = 3.14$
Input: Radius for Circle, Radius & Height for Cylinder

5. Student Feedback Processing System: Imagine you're building a simple system for collecting feedback from students at the end of a course. Each student can give up to three short feedback points about the training session. Your task is to develop a program that stores this feedback and presents it in a clear and summarized way.

Ask the user how many students will give feedback.

For each student:

Ask for their name.

Collect 3 feedback points from them (these can be short phrases).

After collecting feedback for all students:

Display each student's name along with their individual feedback points.

Also display a one-line summary of their feedback by combining all three points into a single sentence.

Sample Input:

Enter number of students: 1

--- Student 1 ---

Enter name: Alice

Enter 3 feedback points:

> Great teaching

> Need more examples

> Loved the interactive session

Sample Output:

Student: Alice

Individual Feedback:

- Great teaching

- Need more examples

- Loved the interactive session

Summary:

Great teaching. Need more examples. Loved the interactive session.
